# A Snapshot of Colorectal Cancer

## **Incidence and Mortality Rate Trends**

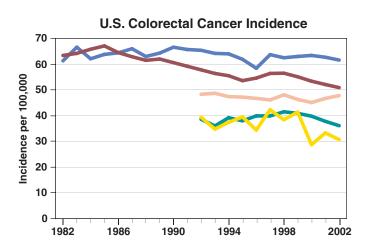
Colorectal cancer is the third most common cancer and the third leading cause of cancer-related mortality in the United States. Over the past decade, colorectal cancer incidence and mortality rates have modestly decreased or remained level. Until age 50, men and women have similar incidence and mortality rates; after age 50, men are more vulnerable.

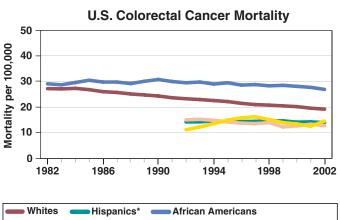
There are striking differences between racial and ethnic groups in both incidence and mortality.

It is estimated that approximately \$8.4 billion\* is spent in the United States each year on treatment of colorectal cancer.

\*In 2004 dollars, as reported in Brown ML, Riley GF, Schussler N, and Etzioni RD. Estimating health care costs related to cancer treatment from SEER-Medicare data. *Medical Care* 2002 Aug; 40 (8 Suppl): IV-104-17.

Source for incidence and mortality data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts available at: http://seer.cancer.gov/





Whites Hispanics\* African Americans

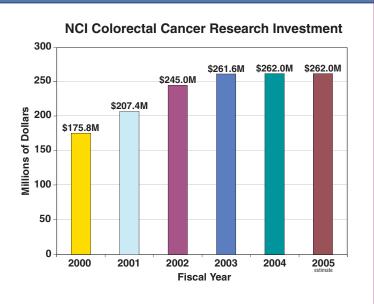
Asians or Pacific Islanders\* American Indians/Alaskan Natives\*

\*Incidence and mortality data not available for earlier years.

## **Trends in NCI Funding for Colorectal Cancer Research**

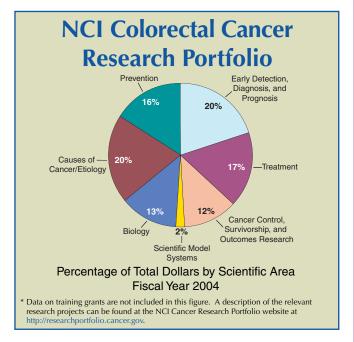
The National Cancer Institute's investment in colorectal cancer research has increased from \$175.8 million in fiscal year 2000 to an estimated \$262.0 million in fiscal year 2005.

Source: NCI Financial Management Branch http://www3.cancer.gov/admin/fmb



#### Examples of NCI Research Initiatives Relevant to Colorectal Cancer

- Five gastrointestinal cancer-specific Specialized Programs of Research Excellence (SPOREs) are moving results from the laboratory to the clinical setting. http://spores.nci.nih.gov/current/gi/gi.html
- The Cancer Care Outcomes Research and Surveillance Consortium (CanCORS) is studying the relationship between newly diagnosed lung and colorectal cancer patients, their providers, systems for delivering their care, and clinical practice and outcomes. http://healthservices.cancer. gov/cancors/
- The Unconventional Innovations Program spurs the development of new technologies in cancer detection, diagnosis, and treatment. This program funds a variety of novel research projects aimed at treating breast, colon, prostate, brain, and pancreatic cancer. http://otir.cancer.gov/tech/uip. html
- The Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial (PLCO), a large-scale clinical trial, is determining whether specific cancer-screening tests are reducing deaths from these cancers. http://www3.cancer.gov/prevention/ plco/index.html
- The Colon Cancer Family Registries initiative is a national network of centers that maintain resources and provide them to researchers studying genetic and environmental susceptibility to colon cancer. http://epi.grants.cancer.gov/CFR/about\_colon.html



- Centers for Excellence in Cancer Communication Research are supporting interdisciplinary research to facilitate rapid advances in knowledge about cancer communications, including studies on how patients, cancer survivors, and the public seek information on colon cancer, and on the development of tailored messages promoting fruit and vegetable intake among African Americans. http://cancercontrol.cancer.gov/hcirb/ceccr/
- The Colon and Rectal Cancer Home Page provides up-to-date information on colorectal cancer treatment, prevention, genetics, causes, screening, testing, and other topics. http://www.cancer.gov/ cancerinfo/types/colon-and-rectal

#### **Selected Opportunities for Advancement of Colorectal Cancer Research**

- Aid in disease prognosis and in the design of individualized treatment strategies and develop molecular classifications of colorectal cancer subtypes.
- Develop and validate new chemopreventive and therapeutic approaches for colorectal cancer, including the use of molecularly targeted drugs, as well as combinations of drugs and/or treatment modalities.
- Improve diagnostic accuracy for premalignant and malignant lesions and develop functional imaging technology to noninvasively assess the
- effects of treatment. Functional imaging detects molecular activity in cells and their surroundings and holds promise in detecting the interaction of a treatment agent with its intended molecular target.
- Develop methods for subtyping tumors on the basis of genetic and molecular alterations to help define the biologic characteristics of normal, premalignant, and malignant lesions that indicate the likelihood of neoplastic transformation, recurrence after initial treatment, and favorable response to a particular treatment.